

# PHF16 (T-14): sc-168943

## BACKGROUND

PHF16 (PHD finger protein 16), also known as JADE3, is an 823 amino acid protein that belongs to the JADE family. PHF16 contains two mid-molecule tandem plant homology domain (PHD) zinc fingers and is expressed in early organogenesis. Endogenous JADE proteins, including Jade-1, PHF15 and PHF16, co-purify with the HBO1 complex, along with either of the individual PHD zinc finger proteins ING4 or ING5. The complex exhibits Histone H4-specific acetyltransferase activity, reduced activity toward Histone H3 and is responsible for the bulk of Histone H4 acetylation *in vivo*. The gene that encodes PHF16 maps to human chromosome Xp11.23, which is linked to early speech and language delay, mild mental retardation, macrocephaly, early myopia, mild scoliosis and hypomelanosis of Ito through a *de novo* duplication of Xp11.3-p11.4 and random X inactivation.

## REFERENCES

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3. Komor, M., et al. 2005. Transcriptional profiling of human hematopoiesis during *in vitro* lineage-specific differentiation. *Stem Cells* 23: 1154-1169.
4. Sasaki, H., et al. 2008. Orthotopic implantation mouse model and cDNA microarray analysis indicates several genes potentially involved in lymph node metastasis of colorectal cancer. *Cancer Sci.* 99: 711-719.
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6. Lalancette, C., et al. 2008. Computational identification of transcription frameworks of early committed spermatogenic cells. *Mol. Genet. Genomics* 280: 263-274.
7. Zou, Y.S., et al. 2009. Developmental disability and hypomelanosis of Ito in a female with 7.3 Mb *de novo* duplication of Xp11.3-p11.4 and random X inactivation. *Am. J. Med. Genet. A* 149A: 2573-2577.

## CHROMOSOMAL LOCATION

Genetic locus: PHF16 (human) mapping to Xp11.23; Phf16 (mouse) mapping to X A1.3.

## SOURCE

PHF16 (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PHF16 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-168943 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

PHF16 (T-14) is recommended for detection of PHF16 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other PHF family members.

PHF16 (T-14) is also recommended for detection of PHF16 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PHF16 siRNA (h): sc-91281, PHF16 siRNA (m): sc-152210, PHF16 shRNA Plasmid (h): sc-91281-SH, PHF16 shRNA Plasmid (m): sc-152210-SH, PHF16 shRNA (h) Lentiviral Particles: sc-91281-V and PHF16 shRNA (m) Lentiviral Particles: sc-152210-V.

Molecular Weight of PHF16: 94 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.